

MONTHLY WEATHER REVIEW,

MARCH, 1879.

(General Weather Service of the United States.)

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

In compiling the present REVIEW the following data, received up to April 14th, have been made use of, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 122 Signal Service stations and 12 Canadian stations, as telegraphed to this office; monthly journals and means, 142 and 141 respectively, from the former, and monthly means from 13 of the latter; reports from 27 special Sunset stations; 205 monthly registers from Voluntary Observers; 55 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from Voluntary Observers in, and the local Weather Services of, the States of Iowa and Missouri; reliable newspaper extracts; special reports.

BAROMETRIC PRESSURE.

Upon chart No. II is illustrated the general distribution of the atmospheric pressure, as reduced to sea-level, for the month by the isobaric lines. Compared with the means for March of previous years, the average pressure for the present month is lower 0.08 inch for Portland, Or., and from 0.01 to 0.02 for Minnesota and Red River of the North Valley. For all the other districts it averages above; California, 0.03 to 0.05; Rocky Mountains stations, from 0.05 in Montana to 0.12 in New Mexico; plains of Kansas, Nebraska and Indian Territory, 0.10 to 0.12; Missouri valley, 0.03 to 0.06; Mississippi valley, (except Minnesota,) 0.02 at La Crosse to 0.09 at Cairo; Gulf States, 0.05 to 0.08; Ohio valley and Tennessee, 0.07 to 0.09; Upper Lake region, 0.00 to 0.08; Lower Lake region, 0.06 to 0.12; South Atlantic States, 0.04 at Charleston to 0.15 at Cape Hatteras; Middle Atlantic States, 0.06 to 0.12; New England, 0.11 to 0.16 inch.

The Local Barometric Ranges for the month are as follows: California, least, from 0.42 inch at San Diego to 0.67 at Red Bluff; Western Plateau, 0.60 at Pioche to 0.90 at Boise City; Rocky Mountains, 0.55 at Fort Craig to 0.87 at Virginia City; Portland, Or., 1.19; Gulf States, 0.50 at Key West to 0.90 at St. Marks, 0.68 at New Orleans and 1.19 at Fort Stockton; Tennessee and the Ohio valley, 0.83 at Cairo to 1.01 at Knoxville; plains of Nebraska, Kansas and Indian Territory, 1.16 at Fort Gibson to 1.46 at North Platte; Northwest, 0.89 at St. Louis to 1.27 at St. Paul, 1.45 at Yankton and 1.00 at Bismarck; Red River of the North Valley, 1.15 at Pembina to 1.39 at Breckenridge; Upper Lake region, 0.96 at Chicago to 1.26 at Marquette; Lower Lake region, 0.97 at Cleveland to 1.21 at Oswego; Middle Atlantic States, 1.26 at Fort Whipple to 1.46 at New York city; South Atlantic States, 1.03 at Jacksonville to 1.61 at Cape Hatteras; New England, 1.29 on Mt. Washington to 1.38 at Burlington, 1.86 at Wood's Holl and 1.94 at Eastport.

Areas of High Barometer.—Of these eleven were sufficiently well marked to merit a description. In the Atlantic States and Florida, generally, the minimum temperatures of the month were produced by No. I on the 1st and 2nd; in Dakota, Montana, Idaho, Nevada and Utah, by No. II on the 1st; in California, by No. III on the 3rd; over the northern portions of New York and New England, by No. IV on the 6th; in the Upper Mississippi and Lower Missouri valleys and Kansas on the 14th, in the Upper Lake region, from the 15th to the 17th, and over Lake Erie, the Ohio valley, West Virginia, Tennessee and the Gulf States west of Georgia, from the 17th to the 19th, by No. VI.